

Amendments to the Claims

For the convenience of the Examiner, all pending claims of the present Application are shown below whether or not an amendment has been made and applying the revised format guidelines of 37 CFR 1.121.

1. (Currently Amended) A method for modeling a legacy computer system comprising:

identifying incidents of applications of the legacy computer system that output data; ~~and~~
defining a control flow graph of the output ~~incidents~~incidents; and
wherein the incidents comprise report commands.

2. (Original) The method of Claim 1 further comprising:

identifying the value or type of the data fields associated with each output incident; and
attaching the value or type to the control flow graph.

3. (Original) The method of Claim 2 wherein identifying the value or type further comprises:

identifying output incidents of invariant data fields; and
attaching the value of each invariant data field to its associated control flow graph incident.

4. (Original) The method of Claim 2 wherein identifying the value or type further comprises:

identifying output incidents of variant data fields; and
attaching the type of each variant data field to its associated control flow graph incident.

5. (Currently Amended) ~~The method of Claim 1~~ A method for modeling a legacy computer system comprising:

identifying incidents of applications of the legacy computer system that output data;

defining a control flow graph of the output incidents; and

wherein the control flow graph ~~comprises plural~~ comprises plural nodes having associated arcs, each node associated with an output incident.

6. (Original) The method of Claim 5 wherein a complete control flow graph of the application (N,A) is used to compute a directed graph (NR, AR) wherein:

n comprises a node in NR if n, an element of N, starts an output process, stops an output process or outputs data; and

<n1, nm> comprises an arc in AR if n1 and nm are in NR and a sequence of arcs <n1, n2>, <n2, n3>, . . . , <nm-1, nm> is in A such that for i from 2 to m-1, ni is not in NR.

7. (Original) The method of Claim 6 further comprising:

defining the control flow graph as a formal grammar that describes the flow paths from each start command to the associated stop commands.

8. (Currently Amended) ~~The method of Claim 1 further comprising:~~ A method for modeling a legacy computer system comprising:

identifying incidents of applications of the legacy computer system that output data;

defining a control flow graph of the output incidents;

associating the incidents with an Extensible Markup Language schema; and

creating a specification to modify the legacy computer system applications to provide output in Extensible Markup Language format.

9. (Original) The method of Claim 8 further comprising:

automatically modifying the legacy computer system applications in accordance with the specification.

10. (Currently Amended) A system for modeling an output application of a legacy computer system comprising:

a modeling engine interfaced with the legacy computer system, the modeling engine operable to analyze an application loaded on the legacy computer system to identify incidents within the application that output data from the legacy computer system; ~~and~~

a control flow graph of the output ~~operations~~ incidents within the ~~applications~~ application; and

wherein the incidents comprise report commands.

11. (Original) The system of Claim 10 wherein the control flow graph comprises plural nodes, each node associated with an output incident.

12. (Currently Amended) ~~The system of Claim 11~~ A system for modeling an output application of a legacy computer system comprising:

a modeling engine interfaced with the legacy computer system, the modeling engine operable to analyze an application loaded on the legacy computer system to identify incidents within the application that output data from the legacy computer system;

a control flow graph of the output incidents within the applications;

wherein the control flow graph comprises plural nodes, each node associated with an output incident;

wherein a complete control flow graph of the application (N,A) is used to compute a directed graph (NR, AR) wherein:

n comprises a node in NR if n, an element of N, starts an output process, stops an output process or outputs data; and

$\langle n1, nm \rangle$ comprises an arc in AR if $n1$ and nm are in NR and a sequence of arcs $\langle n1, n2 \rangle, \langle n2, n3 \rangle, \dots, \langle nm-1, nm \rangle$ is in A such that for i from 2 to $m-1$, ni is not in NR.

13. (Currently Amended) The system of claim 10 wherein the control flow graph of the output ~~operations~~ incidents comprises as a formal grammar that describes the flow paths from each start command to the associated stop commands.

14. (Original) The system of Claim 10 further comprising a graphical user interface in communication with the modeling engine, the graphical user interface operable to display the control flow graph formal grammar and the incidents.

15. (Original) The system of Claim 14 wherein the graphical user interface further communicates with a mapping engine and an Extensible Markup Language schema, the mapping engine operable to map the incidents of the applications with the control flow graph formal grammar and the Extensible Markup Language schema.

16. (Previously Presented) A method for modeling a legacy computer system comprising:

defining a control flow graph of output incidents of applications of a legacy computer system;

wherein the control flow graph comprises plural nodes having associated arcs, each node associated with an output incident; and

wherein a complete control flow graph of the application (N,A) is used to compute a directed graph (NR, AR) wherein:

n comprises a node in NR if n, an element of N, starts an output process, stops an output process or outputs data; and

$\langle n_1, n_m \rangle$ comprises an arc in AR if n_1 and n_m are in NR and a sequence of arcs $\langle n_1, n_2 \rangle, \langle n_2, n_3 \rangle, \dots, \langle n_{m-1}, n_m \rangle$ is in A such that for i from 2 to m-1, n_i is not in NR.

17. (Previously Presented) The method of Claim 1, wherein identifying incidents of applications of the legacy computer system comprises identifying incidents of applications of the legacy computer system within the source code of the applications.


18. (Canceled)

19. (Previously Presented) The system of Claim 10, wherein the modeling engine is operable to identify the incidents within the source code of the application.

20. (Canceled)

21. (New) A method for modeling a legacy computer system, comprising:
identifying commands of program applications of the legacy computer system that
output data; and
defining a control flow graph of the output commands.

22. (New) The method of Claim 21, further comprising:
identifying the value or type of the data fields associated with each output command;
and
attaching the value or type to the control flow graph.



23. (New) The method of Claim 22, wherein identifying the value or type further
comprises:
identifying output commands of invariant data fields; and
attaching the value of each invariant data field to its associated control flow graph
command.

24. (New) The method of Claim 22, wherein identifying the value or type further
comprises:
identifying output commands of variant data fields; and
attaching the type of each variant data field to its associated control flow graph
command.

25. (New) The method of Claim 21, further comprising:
associating the commands with an Extensible Markup Language schema; and
creating a specification to modify the legacy computer system program applications to
provide output in Extensible Markup Language format.

26. (New) The method of Claim 25, further comprising automatically modifying
the legacy computer system program applications in accordance with the specification.

27. (New) The method of Claim 21, wherein identifying commands of program applications of the legacy computer system comprises identifying commands of program applications of the legacy computer system within the source code of the program applications.

28. (New) The method of Claim 5, further comprising:
identifying the value or type of the data fields associated with each output incident; and
attaching the value or type to the control flow graph.

29. (New) The method of Claim 28, wherein identifying the value or type further comprises:
identifying output incidents of invariant data fields; and
attaching the value of each invariant data field to its associated control flow graph incident.

30. (New) The method of Claim 28, wherein identifying the value or type further comprises:
identifying output incidents of variant data fields; and
attaching the type of each variant data field to its associated control flow graph incident.

31. (New) The method of Claim 5, further comprising:
associating the incidents with an Extensible Markup Language schema; and
creating a specification to modify the legacy computer system applications to provide output in Extensible Markup Language format.

32. (New) The method of Claim 31, further comprising automatically modifying the legacy computer system applications in accordance with the specification.
